



A.D. 1865, *7th APRIL.* N^o 1001.

S P E C I F I C A T I O N

OF

MICHAEL HENRY.

PURIFYING SMOKE.

L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY :

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27, SOUTHAMPTON BUILDINGS, HOLBORN.

1865.



A.D. 1865, 7th APRIL. N° 1001.

Purifying Smoke.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Michael Henry at the Office of the Commissioners of Patents, with his Petition, on the 7th April 1865.—A communication from abroad by Joseph Bourgeois and Jules Mathieu, both of 33, Boulevard Saint Martin, Paris, France.

5 I, MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN THE MODE OF AND APPARATUS FOR PURIFYING SMOKE, WHICH IMPROVEMENTS ARE ALSO APPLICABLE TO OTHER PURPOSES IN WHICH GAS OR VAPOUR IS TO BE SEPARATED FROM SUBSTANCES COMBINED THEREWITH OR HELD IN SUSPENSION THEREIN,” com-
10 municated to me from abroad by Joseph Bourgeois and Jules Mathieu, both of 33, Boulevard Saint Martin, Paris, France, to be as follows :—

The principle object of this Invention is to purify or separate smoke from soot or fuliginous matters ; it is also applicable to other purposes in which gas or vapour is to be separated from solids combined therewith, or matters held
15 in suspension therein, the purification or separation being so effected that the soot or other matters expelled from the smoke, gas, or vapour, may be usefully applied.

The Invention consists in the employment and construction of apparatus in which the smoke, gas, or vapour is led into a passage or chamber, and caused
20 to pass through it in a downward direction, and while descending it is subjected to the action of water or other liquid, or of a solid substance, such water, liquid, or solid being introduced in showers or jets, or in a finely divided condition, and caused to drop or fall through the passage or chamber so as to pass in a downward direction through the smoke, gas, or vapour therein, at

Henry's Improvements in Purifying Smoke.

a greater velocity of descent than such smoke, gas, or vapour, from which in its descent it separates or expels the soot or other solid matters combined therewith, or substances held in suspension therein, and falls with the substances so separated or expelled into a receiver at the bottom of the passage or chamber. The soot or other substances so expelled may be afterwards 5 separated from the water or other agent in order to be usefully applied. For furnace smoke the height of purifying or separating passage recommended in many cases is four metres, say 12 feet to 12 feet 6 inches (English).

DESCRIPTION OF THE DRAWING.

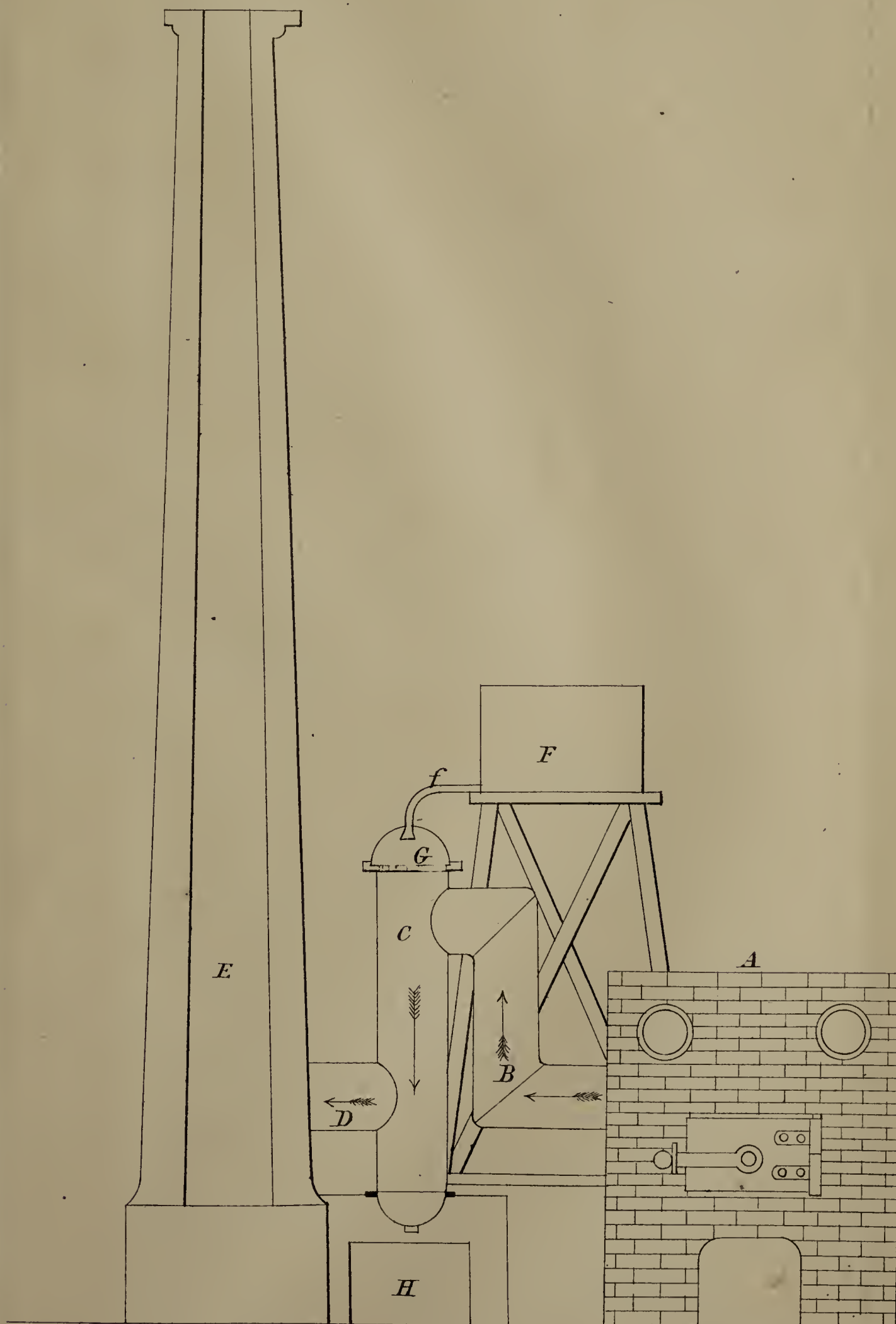
Figure 1 is an elevation, partly in section, in which A is a furnace, from 10 which the smoke passes in the direction of the arrows through a flue B, down a passage C, and along a flue D into a chimney E. While the smoke is passing down the passage C, cold water is injected from a tank F by a pipe *f* through a perforated plate G, which divides it into fine jets or showers which descend the chamber C through the smoke therein, but at greater velocity, 15 and carry off the soot into the receiver H.

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A.D. 1865, APRIL 7, N° 1001,
HENRY'S PROVISIONAL SPECIFICATION.

FIG. 1.



The drawing left with Provisional Specification is partly colored

Drawn on Stone by Malby & Sons.

